

2. Descriptions of new Species of Land and Marine Shells  
from Australia and the Solomon and Louisiade Islands.  
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(Plate XLVIII.)

*HELIX ALLASTERI*, sp. nov.

Shell with a deep narrow concealed umbilicus, semiglobose, smooth, transversely very finely striated with lines of growth; the whorls of the apex also longitudinally finely striated, translucent, pale straw-coloured, ornamented above and below with numerous rather narrow opaque white and clear bands; whorls 5, rapidly increasing in size, the last much inflated and obtusely carinated, not depressed in front, convex above and below; aperture ovately rounded, subangulated at the periphery, showing the opaque and clear zones within; peristome smooth and shining; lip very broadly expanded and reflexed; margins approximate, upper attached to the carina of the body-whorl, columellar broadly dilated, overhanging and concealing the umbilicus.

Diam., greatest 0·98, least 0·64; height 0·60 of an inch.

*Hab.* Solomon Islands (*mus. Cox*).

This beautiful species may be at once distinguished by the very peculiar alternate opaque white and clear zones. Amongst a large number of specimens procured I have not found one to vary in this respect.

(The specimen sent was so broken in transit that it could not be figured.—ED.)

*HELIX (CAMÆNA) ARTHURIANA*, sp. nov. (Plate XLVIII. figs. 1, 1 a.)

Shell globosely depressed, largely and openly umbilicated, very dark chestnut, almost black, lighter at the apex, transversely finely striated; whorls 6, very gradually increasing in size, last sharply depressed in front; suture conspicuously margined below with white; spire bluntly convex; base somewhat flattened; aperture ovately lunate, livid within, margins closely approximate, joined by a thin callus; peristome straight, expanded and reflexed, of an intensely dark livid purple colour; columellar margin triangularly dilated, overhanging the umbilicus.

Diam., greatest 1·28, least 0·90; height 0·77 of an inch (*mus. Hargraves*).

*Hab.* L Island, Torres Straits, North Australia.

More closely allied to *H. o'connellensis*, Cox, than to any other species. It is more globose, and it has not the excavated base round the umbilicus so characteristic of that species; the aperture is also much more round, with the margins more approximated.

*HELIX (CAMÆNA) RAWNESLEYI*, sp. nov. (Plate XLVIII. fig. 2.)

Shell broadly coniform, openly umbilicated, obliquely finely striated



1



8



1<sup>a</sup>



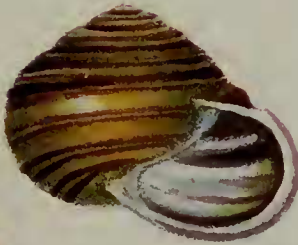
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12



3



5<sup>a</sup>



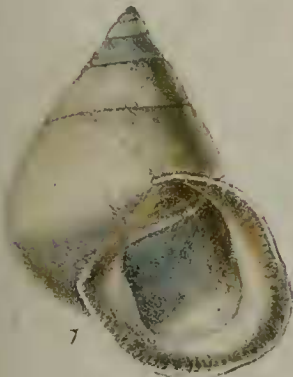
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9



6<sup>a</sup>



7



10



Helena Forte et Sowerby del. Sowerby sculp.

M&N Hancock imp.



throughout, very dark chestnut, lighter towards the apex, which is ornamented with very narrow spiral bands; spire raised, bluntly conoid; whorls  $7\frac{1}{2}$ , convex; margin of suture faintly lined with white below; last whorl deflexed in front, base flattened; umbilicus large, half closed by the reflexed expansion of the columellar margin; aperture ovately lunate; margins much approximated, joined by a thin purple callus; peristome everted, of a dark livid purple, as is also the interior of the aperture; columella triangularly dilated.

Diam., greatest 1·68, least 1·25; height 1·58 inch.

*Hab.* Mount Elliott, near Port Denison, Queensland, North Australia.

*HELIX (CAMÆNA) CHALLISI*, sp. nov. (Plate XLVIII. fig. 3.)

Shell solid, heavy, umbilicated, depressedly orbicular, closely finely striated, of a waxy yellow colour, ornamented by six or more rather narrow dark chestnut bands of irregular sizes and distances apart, dark around the umbilicus; spire moderately raised, bluntly convex; whorls 7, convex, very gradually increasing in size, last shortly deflected in front; aperture ovately lunate, margins slightly approximating, joined by a thin callus, interior of aperture showing dark lines of ornamentation; peristome straight, pure white, slightly thickened and reflexed, columellar margin triangularly expanded, half covering the rather narrow umbilicus.

Diam., greatest 1·22, least 0·89; height 0·90 of an inch.

*Hab.* L Island, Torres Straits (*mus. Hargraves*).

The present adds another to the large number of species recorded of the *Camæna* type of Australian land-shells, most of them being extremely limited in their habitats, every island almost in Torres Straits possessing its own special species.

*HELIX (CORASIA) BALCOMBEI*, sp. nov. (Plate XLVIII. fig. 4.)

Shell imperforate, depressed, almost flat above, convex below, very thin, glossy, pale straw-coloured, coarsely striated above and below with regular oblique transverse striæ, and longitudinally with strongly marked very slightly waved striæ, giving by their decussation a granular appearance to the surface of the shell; spire scarcely raised, suture impressed; whorls 4, slightly convex above, rapidly increasing in size; last whorl inflated below, and very prominently and sharply keeled, the keel edged with an opaque white line, base rounded; aperture large, subtrapezoidal, acutely angled at the periphery; peristome slightly thickened and everted, upper margin attached to the carina of the last whorl; columella dilated, appressed, and indented over the umbilical region.

Diam., greatest 1·09, least 0·78; height 0·48 of an inch.

*Hab.* Solomon Islands (*mus. Hargraves*).

This species appears to be closely allied to *H. (Caracolla) papyracea*, Brod.

*HELIX LEEI*, sp. nov. (Plate XLVIII. figs. 5, 5a.)

Shell with a large, open, funnel-shaped umbilicus, thin, translucent, globosely depressed, of a dark cinnamon-brown colour,



transversely rather coarsely striated throughout, and covered above and below with oblique rows of prominent rather coarse setæ; spire slightly raised, bluntly convex; suture deeply impressed; whorls 5, convex, gradually increasing in size, last somewhat inflated, rounded below, excavated round the umbilicus, and gradually depressed in front for half the circumference of the whorl; aperture transversely oval, lip broadly expanded and slightly thickened, triangularly dilated at the columella, the outer margin of which overhangs the umbilicus; margins of aperture joined by a thin callus.

Diam., greatest 1·21, least 0·95; height 0·76 of an inch.

*Hab.* Louisiade Islands, on the north-east coast of Australia.

This species has the general aspect of a large specimen of *H. erinaceus*, Pfr.

*HELIX* (*GEOTROCHUS*) *REDEMPTA*, sp. nov. (Plate XLVIII. figs. 6, 6 a.)

Shell orbicularly convex, imperforate, obliquely finely striated from above downwards and backwards with straight striæ, and on the last two whorls from behind forwards with interrupted malleated striæ, of a dull opaque white colour, apex pink, variously ornamented with irregular dark chestnut spots, or with two or more regular broad bands; spire bluntly coniform; whorls 5, slightly convex, last sharply keeled and shortly deflected in front, base flattened; aperture quadrilateral, beaked at the periphery of the last whorl, margins joined by a thin pink callus; peristome pink, narrowly reflexed; columella broadly dilated, blending with the pink callus joining the margins, and occluding the umbilicus.

Diam., greatest 1·09, least 0·84; height 0·72 of an inch.

*Hab.* Solomon Islands.

The present shell is one of three specimens of *Helix* submitted two or three years ago to Mr. G. F. Angas for identification, one of which was pronounced to be *H. louisiadensis*; a second was labelled as a dead, very much worn variety of *H. fringilla*; and the third, the one I am now describing, was sent back as a variety of *H. eros*.

Examples of the first I circulated under the title of *H. louisiadensis*; but Mr. Angas on further comparison of the specimens has recently determined that it is a new species, which he has named *H. philomela*. The figure, however, given by him is that of the rarest variety, and cannot be regarded as the ordinary representative of the species. It is found abundantly at the Louisiade and the Solomon Islands; and the prevailing colour is white with a dark black edge behind the reflexed lip, "a pigment-like deposit."

The shell labelled as "a dead, very much worn variety of *H. fringilla*" I saw could not on any pretence be admitted to be such; and, trusting to Mr. Angas's diagnosis of *H. louisiadensis*, I considered it new, and described it as *H. millicentæ* in these 'Proceedings' for 1871. I now find that it proves only to be a very rare variety of *H. louisiadensis* with a white lip, as in this particular it differs from a number of specimens recently received by me of this hitherto rare species.

The third specimen, at the time unique, which was sent back to me as a large variety of *H. eros*, I venture to describe as a new species; for there are now many fine examples in the collection of Mr. Hargraves, from the constancy of the characters of which I am enabled to exhibit a specific distinctness from others of the group.

*HELIX (GEOTROCHUS) MACFARLANEI*, sp. nov.

Shell imperforate, thin, globosely conical, smooth, white, ornamented with one broad black band encircling the last whorl at the middle, and a broad blackish-brown zone round the umbilical region, also with dark brown or black interrupted broad zigzag lines running interruptedly across the last three whorls, with additional isolated irregularly disposed round black spots, principally on the body-whorl; apex pale, denuded of colour; transversely finely striated above and below, and concentrically striated at the base; whorls 6, rounded, gradually increasing in size, last slightly deflected in front at its termination, base convex; aperture obliquely ovate-lunate; peristome slightly thickened and everted, margined internally with white, and externally with orange; interior of aperture tinged with orange, the external dark band on the body-whorl showing through; margins approximating, joined by a very thin callus; columella dilated externally, adnate over the umbilical region, internal margin descending, straight.

Diam., greatest 0·92, least 0·68; height 0·72 of an inch.

*Hab.* Solomon Islands (*mus. Cox*).

I have named this very beautiful species after its discoverer, Captain Macfarlane, who has taken much trouble to collect the shells from the above group, and whose careful observation has greatly assisted in obtaining their correct habitats. It is somewhat allied to *H. coxianus* of Angas.

(The specimen sent was so broken in transit that it could not be figured.—ED.)

*PUPINA GRANDIS*, Forbes, var. *MINOR*.

Amongst a number of specimens recently obtained of this hitherto very rare shell is a small variety, so small, indeed, as to mislead in the identification of the species, if not pointed out.

Length 0·88; breadth 0·40 of an inch.

*Hab.* Louisiade Islands.

A second variety, of a large size, with a white peristome, is also worthy of note.

*HELIX (GEOTROCHUS) XANTHOCHILA*, Pfr. (Plate XLVIII. fig. 7.)

A variety of this fine species has been obtained in abundance where the reflexed lip is converted into a beautiful broad crenulated frill, and generally pure white. So much does it alter the character of the shell that it would lead to some difficulty in identifying the species. It is no accidental deformity, as the variety is almost as abundant as the original type.